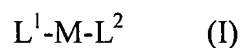


Please amend the above-identified application as follows:

Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): Transition metal complex of the formula (I)

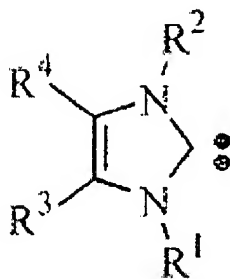


where

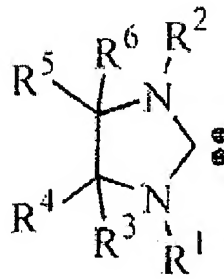
M is a nickel, palladium or platinum atom,

L^1 is a ligand having at least one electron-deficient olefinic double bond carrying one, two, three or four substituents, each substituent having an electronegativity greater than that of a hydrogen substituent, and

L^2 is a monodentate carbene ligand of the formula (II) or (III)



(II)



(III)

in which

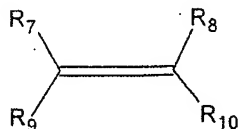
the R^1 and R^2 radicals are each independently an alkyl radical including a cycloalkyl

radical, an aryl radical or heteroaryl radical, each of which may optionally be substituted, and the R^3 to R^6 radicals are each independently selected from a hydrogen or halogen atom, $-\text{NO}_2$, $-\text{CN}$, $-\text{COOH}$, $-\text{CHO}$, $-\text{SO}_3\text{H}$, $-\text{SO}_2-(\text{C}_1-\text{C}_8)\text{alkyl}$, $-\text{SO}-(\text{C}_1-\text{C}_8)\text{alkyl}$, $-\text{NH}-(\text{C}_1-\text{C}_8)\text{alkyl}$, $-\text{N}((\text{C}_1-\text{C}_8)\text{alkyl})_2$, $-\text{NHCO}-(\text{C}_1-\text{C}_4)\text{alkyl}$, $-\text{CF}_3$, $-\text{COO}-(\text{C}_1-\text{C}_8)\text{alkyl}$, $-\text{CONH}_2$, $-\text{CO}-(\text{C}_1-\text{C}_8)\text{alkyl}$, $-\text{NHCOH}$, $-\text{NH-COO}-(\text{C}_1-\text{C}_4)\text{alkyl}$, $-\text{CO-phenyl}$, $-\text{COO-phenyl}$, $-\text{CH=CH-CO}_2-(\text{C}_1-\text{C}_8)\text{alkyl}$, $-\text{CH=CHCO}_2\text{H}$, $-\text{PO(phenyl)}_2$, $-\text{PO}((\text{C}_1-\text{C}_8)\text{alkyl})_2$, an optionally substituted alkyl radical, an optionally substituted aryl radical, or an optionally substituted heteroaryl radical, or at least two of the R^3 to R^6 radicals together with the carbon atoms to which they are bonded form a 4- to 12-membered ring.

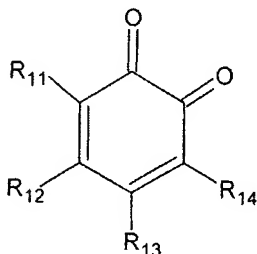
Claim 2 (original): Transition metal complex according to Claim 1 where M is Pd.

Claim 3 (previously presented): Transition metal complex according to Claim 1 where the electron-deficient olefinic double bond in L^1 bears at least one electron-withdrawing substituent selected from a cyano group, an aldehyde group, a ketyl radical, a carboxylic acid group, a carboxylic ester radical, carboxamide radical or N-substituted carboxamide radical.

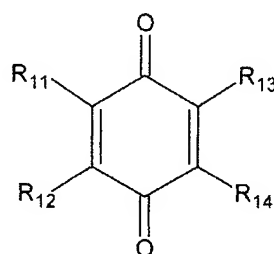
Claim 4 (previously presented): Transition metal complex according to Claim 1 where L^1 is selected from compounds of the formulae (IV), (V) or (VI)



(IV)



(V)



(VI)

in which

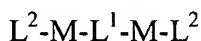
R^7 is selected from -CN, -COH, -COR¹⁵, -COOH, -COOR¹⁵, -CONHR¹⁵, and -CONR¹⁵R¹⁶, where R¹⁵ and R¹⁶ are each independently a hydrogen atom, a C₁-C₆ alkyl radical or C₂-C₆ alkenyl radical, and R⁸, R⁹ and R¹⁰ are each independently selected from a hydrogen atom, a C₁-C₈ alkyl radical, a C₂-C₈ alkenyl radical, a halogen atom, a hydroxyl group, -CN, -COH, -COR¹⁵, -COOH, -COOR¹⁵, -CONHR¹⁵ and -CONR¹⁵R¹⁶, where R¹⁵ and R¹⁶ are each as defined above, or two suitable R⁷, R⁸, R⁹, R¹⁰, R¹⁵ and R¹⁶ radicals together with the atoms to which they are bonded form a 5- to 8-membered ring, R¹¹, R¹², R¹³ and R¹⁴ are each independently selected from a hydrogen atom, a C₁-C₈ alkyl radical, a halogen atom or -CN, or in each case two of the R¹¹ to R¹⁴ substituents together with the atoms to which they are bonded form a 5- to 8-membered ring.

Claim 5 (previously presented): Transition metal complex according to Claim 1 where L¹ is selected from acrylic acid, acrylic esters, acrylonitrile, methacrylic acid, methacrylic esters, methacrylonitrile, benzoquinone, 2-methyl-p-benzoquinone, 2,5-dimethyl-p-benzoquinone, 2,3-dichloro-5,6-dicyano-p-benzoquinone, naphthoquinone, anthraquinone, maleic anhydride, maleimide, maleic acid, maleic esters, fumaric acid, fumaric esters, metal salts of the carboxylic acids mentioned, or tetracyanoethene.

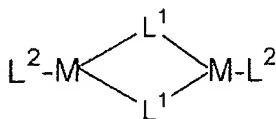
Claim 6 (currently amended): Transition metal complex according to Claim 1 where L² is selected from 1,3-bis(2,4,6-trimethylphenyl) imidazolinylidene, 1,3-bis(2,6-dimethylphenyl) imidazolinylidene, 1,3-bis(1-adamantyl)imidazolinylidene, 1,3-bis(tert-butyl) imidazolinylidene, 1,3-bis(cyclohexyl)imidazolinylidene, 1,3-bis(o-tolyl) imidazolinylidene, 1,3-bis(2,6-diisopropyl-4-methylphenyl)imidazolinylidene and 1,3-bis(2,6-diisopropylphenyl) imidazolinylidene ~~and 1,3-bis(2,6-diisopropylphenyl) imidazolinylidene~~, 1,3-bis(2,4,6-trimethylphenyl)-4,5-dihydroimidazolinylidene, 1,3-bis-(2,6-dimethylphenyl)-4,5-dihydroimidazolinylidene, 1,3-bis(1-adamantyl)-4,5-dihydroimidazolinylidene, 1,3-bis(tert-butyl)-4,5-dihydroimidazolinylidene, 1,3-bis-(cyclohexyl)-4,5-dihydroimidazolinylidene, 1,3-bis(o-tolyl)-4,5-

dihydroimidazolinylidene, 1,3-bis(2,6-diisopropyl-4-methylphenyl)-4,5-dihydroimidazolinylidene and 1,3-bis(2,6-diisopropylphenyl)-4,5-dihydroimidazolinylidene.

Claim 7 (previously presented): Transition metal complex of the following structure (Ia) or (Ib)



(Ia)



(Ib)

where L^1 , L^2 and M are each independently as defined in Claim 1, with the proviso that the bridging L^1 radical is selected in such a way that it has a further coordination site for an Ni, Pt or Pd atom.

Claim 8 (previously presented): Process for preparing a transition metal complex according to Claim 1, comprising the contacting of the ligand L^2 with a metal complex which contains the fragment L^1-M and an additional ligand which can be displaced readily by the ligand L^2 , where L^1 , M and L^2 are each as defined in Claims 1 to 7.

Claim 9 (currently amended): Process for homogenous catalysis of an organic reaction, the process comprising reacting one or more organic reactants in the presence Use of a the transition metal complex according to Claim 1 so as to catalyze in the homogeneous catalysis of an organic reaction.

Claim 10 (currently amended): Process Use according to Claim 9, wherein the organic reaction is selected from olefinations, arylations, alkylations, ketone arylations, aminations, etherifications, thiolizations, silylations, carbonylations, cyanations or

alkynylations of aryl-X compounds or vinyl-X compounds, where X is a leaving group, or of olefinic compounds, or from hydrosilylations of olefins or alkynes or ketones, carbonylations of olefins, di- and oligomerizations of olefins, telomerization of dienes or cross-couplings with organometallic reagents and other transition metal-catalysed coupling reactions.